

Enclosure 2

**Responsiveness Summary: Final Decisions Concerning
Waters Identified For Inclusion on California's 1998 Section 303(d) List
May 3, 1999**

List of Commenters

1. Davis Baltz, Commonweal
2. Henry Clark
3. Terry E. Roberts, City of Oakland Public Works Agency
4. James B. Bewley, California Association of Sanitation Agencies
5. Michele Pla, San Francisco Public Utilities Commission
6. Gina M. Solomon, Natural Resources Defense Council
7. David R. Williams, Bay Area Dischargers Association
8. Leslie R. Katz, San Francisco Board of Supervisors
9. Peter M. Rooney, California Environmental Protection Agency
10. Sharon N. Green, Tom Grovhoug, Tri-TAC
11. Michael M. DeLeon, TOSCO
12. Karen Susag, California Zero Dioxin Exposure Alliance
13. Steven Krefting, San Francisco Commission on the Environment
14. Michael R. Lozeau, Bill Jennings, San Francisco BayKeeper and DeltaKeeper
15. David S. Beckman, Natural Resources Defense Council
16. Alexander R. Coate, East Bay Municipal Utility District
17. John Bowers, The Lake Merritt Institute
18. Gloria Pieretti, Merritt Lakesiders
19. James F. Stahl, County Sanitation Districts of Los Angeles County
20. Robert F. Shanks, Sacramento Regional County Sanitation District
21. Phil Bobel, Regional Water Quality Control Plant
22. Scott Folwarkow, Western States Petroleum Association
23. Peter W. McGaw, Contra Costa Council Environmental Task Force
24. James McGrath, Port of Oakland
25. Douglas Y. Okumura, California Department of Pesticide Regulation
26. Mark Subbotin, Newhall Ranch Company
27. Fredric P. Andes, Sonnenschein, Nath and Rosenthal
28. Mark Leno, San Francisco Board of Supervisors
29. Sue Bierman, San Francisco Board of Supervisors
30. Teresa Jordan (3 letters)
31. Ronald Frazier, Global Garden Projects, Inc.
32. Gavin Newsom, San Francisco Board of Supervisors
33. Robert F. Andrews
34. Melissa Braxton

Note: Many comments have been paraphrased or summarized for brevity. Comments are listed by date. References to "CTR risk assessment" refer to the EPA document: "Analysis

of the Potential Benefits Related to the Implementation of the California Toxics Rule,” U.S. EPA Office of Policy, Planning, and Evaluation and U.S. EPA Region IX, June 1997.

Comment 1: Davis Baltz, Commonweal, letter dated December 1, 1998

1.1 Commenter supports waterbody listings proposed by EPA and believes the additions are reasonable in light of existing scientific data about toxic pollution and its effects on environmental health.

Response: EPA has reached a final decision to add these waters and pollutants to the final 1998 California 303(d) list.

1.2 Commenter supports listings of San Francisco Bay for dioxins, furans, and PCBs and believes they should receive a high priority for action.

Response: The listing of “dioxin-like compounds” for San Francisco Bay is being clarified because some commenters were confused by EPA’s terminology. In the final listing decision, San Francisco Bay is being listed for specific dioxins, furans, and dioxin-like PCBs as high priorities for TMDL development. The listed dioxins, furans, and dioxin-like PCBs include:

Dioxins

2,3,7,8-TCDD
1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD
OCDD

Furans

2,3,7,8-TCDF
1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF
2',3,4,6,7,8-HxCDF
1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF
OCDF

Dioxin-like PCBs

Note: The State listed these pollutants in its submittal to U.S. EPA. They are listed here because EPA is setting a higher priority ranking for development of TMDLs for these types of PCBs than the State set in its listing action.

3,4,4',5-TCB (81)
3,3',3,3'-TCB (77)
3,3',4,4',5-PeCB (126)
3,3',4,4',4,4'-HxCB (169)
2,3,3',4,4'-PeCB (105)
2,3,4,4',5-PeCB (114)
2,3',4,4',5-PeCB (118)
2',3,4,4',5-PeCB (123)
2,3,3',4,4',5-HxCB (156)
2,3,3',4,4',5'-HxCB (157)
2,3',4,4',5,5'-HxCB (167)
2,3,3',4,4',5,5'-HpCB (189)

This is the group of chemicals which comprised “dioxin-like compounds” referred to in the list of pollutants identified for addition to the 1998 list in EPA’s November 3, 1998 decision.¹ In its 1998 listing submission to EPA, the State had already listed the entire PCB chemical group as a medium priority for TMDL development. EPA’s final decision to assign a high priority for TMDL development for dioxin-like PCBs in addition to dioxins and furans recognizes that health risk associated with dioxin-like PCBs is more significant than health risk associated with other PCB compounds, and that a higher priority for TMDL development is warranted as a result. The effect of EPA’s decision is to disapprove the State’s medium priority ranking for dioxin-like PCBs, but to sustain the State’s medium priority for the remaining PCBs. As a practical matter, however, EPA encourages the State to develop TMDLs for all PCBs as a group, and to initiate development of TMDLs for all PCBs for San Francisco Bay as soon as is practicable..

See EPA Staff Report dated November 3, 1998, pp. 58-66 for discussion of EPA’s analysis supporting the listing and priority ranking decisions.

Comment 2. Henry Clark, letter dated December 1, 1998

2.1 Commenter supports the listing of dioxin compounds for San Francisco Bay as a high priority due to health threats associated with dioxin, environmental justice concerns stemming from dioxin exposure, and the long term nature of the dioxin threat.

Response: See response to comment 1.2.

Comment 3. Terry E. Roberts, City of Oakland Public Works Agency, letter dated

¹ The dioxin compound OCDD was inadvertently omitted from the list of compounds to be added, dated November 3, 1998. It is included on the list because EPA intended to list the specific dioxin, furan, and dioxin-like PCB congeners most associated with human health risk and for which the World Health Organization has established toxicity equivalency factors (TEFs). The WHO included a TEF for OCDD.

December 2, 1998

3.1 Commenter supports the listing of dioxin-like compounds as a high priority based on human health risk posed by consumption of contaminated fish tissue.

Response: See response to comment 1.2.

Comment 4. James B. Bewley, California Association of Sanitation Agencies, letter dated December 2, 1998

4.1 EPA failed to approve/disapprove California's 303(d) list within the statutorily required time. By failing to act, EPA has arguably forfeited its right to disapprove the list, and the list should be deemed to be constructively approved.

Response: The regulations do not make any provision for constructive approval or constructive disapproval of a list if EPA does not take action within 30 days. If someone believes EPA has failed to meet its statutory deadline for action, the appropriate remedy would be to seek to compel EPA action under the Clean Water Act. EPA conducted an exhaustive review of California's Section 303(d) list, which included 472 water quality limited segments. EPA's review included a review of the state's responses to the large number of public comments received on the draft Section 303(d) lists. The State provided several written submissions following the initial listing submission which were intended to clarify the State's listing decisions. The last clarifying submission received from the State is dated October 2, 1998, one month before EPA issued its listing decision. While EPA attempted to complete its review within 30 days, the nature and extent of EPA's review, combined with the need to address other Agency obligations, resulted in additional time being needed. There is nothing in the CWA or EPA regulations that prohibits EPA from acting on state lists once 30 days has passed, nor is there anything in the statute or regulations that indicates EPA's failure to act within the prescribed time frame should be construed as implicit approval of the list. In fact, EPA has in many instances taken action on state lists beyond the 30-day time frame, due to the time and Agency resources required to conduct a complete and adequate review of the list.

4.2 EPA's decision to add other waterbodies and pollutants to California's list may violate the Administrative Procedures Act because EPA's decision was based on the State's decision being inconsistent with "federal listing requirements." To the extent that these federal listing requirements include informal agency policies and guidance, this violates the APA because these informal policies were not subject to notice and comment.

Response: "Federal listing requirements" refers to the federal regulations in 40 CFR 130.7. Waterbodies and pollutants were added based solely on the statutory/regulatory requirement that they be included when existing and readily available data and information indicates that water quality standards are not being met, or are not expected to be met. 40 CFR 130.7(b)(1).

4.3 EPA failed to use the proper standard of review, which should be whether the state acted outside its discretionary authority in placing or not placing waters on the list. EPA substituted its own judgment for that of the state.

Response: EPA disagrees with the commenter's statement that the Agency failed to use the proper standard of review. The regulation at 40 CFR 130.7(d)(2) directs EPA to approve a list only if it meets the requirements of 130.7(b). Based on its review of California's list submission and supporting materials, EPA has determined that the California list did not meet the requirements of 130.7(b) because it did not include all water quality-limited segments still requiring TMDLs.

EPA disapproved California's failure to list Stemple Creek, Estero de Americano, Santa Clara River Reaches 7 and 8 for chlorides, and San Francisco Bay (for dioxins, furans, DDT, dieldrin, and chlordane) where the State's rationale for deciding not to list several waterbodies and pollutants was inconsistent with statutory and regulatory requirements. These requirements were explained to the States in advance of the 1998 303(d) listing process through national guidance (see National Clarifying Guidance for 1998 State and Territory Section 303(d) Listing Decisions, memorandum from Robert H. Wayland III, August 27, 1997). Following is a more detailed discussion of EPA's decision on a waterbody-by-waterbody basis:

Stemple Creek and Estero de San Antonio

The State delisted Stemple Creek and Estero de San Antonio because the Regional Board had approved TMDLs for these waters. EPA disapproved this decision because these waters remain water quality limited and TMDLs have not yet been submitted to or approved by EPA (see EPA Staff Report, p. 58). Waters must be listed in this situation (40 CFR 130.7(b)(1)). Once the TMDL is submitted and approved, the water may be removed from the list.

Santa Clara River Chlorides

The State decided not to list Santa Clara River Reaches 7 and 8 for chlorides because the applicable water quality standard was considered to be too stringent and was being reviewed. EPA disapproved this decision because States must apply existing water quality standards in evaluating whether a waterbody is water quality-limited (40 CFR 130.7(b)(1) and (3)). The numeric chlorides standard for Santa Clara River is clearly existing and in effect, and must be applied for 303(d) listing purposes. If the State believes the water quality standards should be changed, it should go through the appropriate process for revising the standards.

San Francisco Bay Dioxins, Furans, DDT, Dieldrin, and Chlordane

EPA regulations require States to consider all existing and readily available data and information and to provide a rationale for any decision not to use any such data and information (40 CFR 130.7(b)(6)(iii)). The State's decision not to list San Francisco Bay for dioxins, furans, dieldrin, chlordane, and DDT did not satisfy this requirement. One

significant information source which the State did not consider, and did not provide a rationale for why it did not use, was the 1997 EPA risk assessment of health risk to San Francisco Bay anglers, which concluded that angler cancer risks were significantly elevated due to likely exposures to these chemicals through consumption of fish from the Bay. See EPA Staff Report, November 3, 1998, pp. 61-62. Excerpts of this risk assessment was provided to the San Francisco Bay RWQCB during its public comment period.

Moreover, the State appeared to base its decision not to list dioxins, furans, DDT, dieldrin, and chlordane for SF Bay primarily on conclusions contained in a memorandum submitted to the State Board by California Office of Environmental Health Hazard Assessment (OEHHA) which addressed the interim fish consumption advisory for SF Bay (memo to State Water Board, May 27, 1998). In this memorandum, OEHHA indicated that it did not expect that a final fish consumption advisory for SF Bay would be based partly on dioxin and furan levels in Bay fish tissue. However, that conclusion was not supported by a thorough analysis of the interim advisory or of the available fish tissue data used to develop the advisory, nor did the State Water Board provide any additional analysis of the fish tissue data or other information sources to support its conclusion that water quality standards are not being exceeded for dioxins, furans, DDT, dieldrin, and chlordane. Additionally, the OEHHA memo did not discuss dieldrin, chlordane, or DDT, despite the fact that the advisory also mentions these legacy pesticides. Thus, it appears that the State either did not fully consider the underlying fish tissue data and the interim advisory in its entirety, or that it considered these sources but did not provide any rationale for not using them.

As discussed in the EPA Staff Report, EPA reanalyzed the underlying fish tissue data to assess whether changes in analysis methods would result in different conclusions concerning dioxins, furans, and dioxin-like PCBs. EPA's analysis concluded that the fish tissue data would exceed State screening levels which indicate potential human health risks. EPA believes this analysis lends additional support to EPA's conclusion that water quality standards are being exceeded for these pollutants.

Based on the State's failure to consider the EPA risk assessment and the underlying fish tissue data, its failure to provide a sufficient rationale for not considering that information, and EPA's analysis that those data sources support the conclusion that the Bay is water quality limited due to these pollutants, EPA is listing the Bay for dioxins, furans, DDT, dieldrin, and chlordane.

Lake Merritt, Stockton Deep Water Channel, and San Francisco Bay Area Urban Streams

The State failed to consider information provided by several commenters during the State's public participation process which supports listing of Lake Merritt, Stockton Deep Water Channel, and San Francisco Bay Urban Streams. Because these information and data sources were provided to the State during the State's public participation process,

they are part of the record available to the State and provided to EPA as part of the listing submission. EPA is required to evaluate whether the State adequately considered such existing and readily available information during the listing process. As discussed in the EPA Staff Report dated November 3, 1998, EPA found that these additional information sources supported 303(d) listings (see pp. 67-68 concerning Lake Merritt, pp. 70-71 concerning Stockton Deep Water Channel, and p. 69 concerning San Francisco Bay Urban Streams).

In its list submission, the State did not respond to comments concerning impairment of San Francisco Bay streams due to diazinon. After the final submission was sent to EPA, the San Francisco RWQCB provided supplemental responses to comments to EPA after the State had submitted its listing package. Although the Regional Board had recommended the listings of 35 urban streams for diazinon, the State did not revise its listing submission to incorporate this change and did not explain its reasons for rejecting the Regional Board staff's recommendation. EPA appreciates the Regional Board's assistance in reviewing these public comments, and EPA based its decision to list 35 urban streams for diazinon on the analysis provided by the Regional Board in the supplemental response to comments.

4.4 EPA's decision to add pollutants such as dioxin-like compounds, DDT, dieldrin, chlordane to the list in the absence of adopted water quality standards for such pollutants is inconsistent with the Clean Water Act. The commenter appears to define a water quality standard as requiring both a designated use and a numeric criterion.

Response: The commenter's reading of 33 USC 1313(c)(2)(A) is incorrect. Water quality standards in California include beneficial uses, narrative criteria and numeric criteria, and the regulations at 40 CFR 130.7(b)(3) specifically define water quality standards for the purpose of listing waters to include narrative criteria and waterbody uses as well as numeric criteria.

Dioxins, furans, DDT, dieldrin, chlordane, and DDT were added to the listing for San Francisco Bay because the COMM beneficial use ("uses of water for commercial or recreational collection of fish ... including ... uses involving organisms intended for human consumption") and the narrative bioaccumulation objective ("controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in ... aquatic life") are not being met. In the Staff Report explaining the basis for EPA's proposed decision, EPA stated that "narrative standards which prohibit the discharge of toxic pollutants in amounts which adversely affect beneficial uses are not being met." Specifically, EPA was evaluating whether the narrative bioaccumulation objective was being met.

Information in the record indicates that ongoing discharges of dioxins, furans, and PCBs are at least partly controllable (see, for example, comments of Communities for a Better Environment, January 30, 1998, and Zero Dioxin Exposure Alliance, December 3, 1998). It is also possible that past discharges of pollutants such as dioxins, furans, and legacy pesticides can be addressed

through remedial actions (e.g., site cleanups, dredging of contaminated sediments). For example, EPA is carrying out remedial actions on aquatic sediments contaminated by toxic pollutants including legacy pesticides.

4.5 EPA failed to require California to adequately prepare the CWA 305(b) list or to base listing decisions on the 305(b) list.

Response: The regulations at 40 CFR 130.7(b)(5)(i) provide that waters identified by the State in its most recent 305(b) report as "partially meeting" or "not meeting" designated uses or as "threatened" should be considered "existing and readily available data" which the state should consider in preparing its 303(d) list. The regulations do not require the 305(b) report and the 303(d) list to be identical. It is EPA's understanding that in preparing the State's 303(d) report, each Regional Board included a review of the State's 1996 Water Quality Assessment, which served as the basis for the 1996 305(b) report (the most recent completed 305(b) report at the time the 1998 303(d) listing decisions were made), thus meeting the regulatory requirement to consider this information. EPA is not aware of, nor have the commenters indicated, any waters which should be considered "partially meeting" or "not meeting" designated uses or as "threatened" which were not included in the 303(d) list. The regulations at 40 CFR 130.7(b)(5) do not require the States or EPA to consider certain information (e.g. reporting of economic and social costs and benefits of actions necessary to achieve the objectives of the Clean Water Act) required to be provided in the 305(b) Report in its 303(d) listing decisions. Rather, the regulations require only that States evaluate waters identified in the most recent 305(b) report as "partially meeting" or "not meeting" designated uses, or as "threatened." Nor do the regulations at 40 CFR 130 require completion of an updated 305(b) report prior to the development and submission of the 303(d) list, but just that the State consider waterbody assessments in the most current report.

4.6 EPA's proposal to override the State's decision constitutes poor public policy. Disrespect of the state's processes threatens the federal-state partnership. Commenter is concerned that a "non-public decision-making process" occurred between the BayKeeper and EPA.

Response: EPA is required by the Clean Water Act and regulations to approve or disapprove the list. EPA is required to follow its regulations at 40 CFR 130.7(d)(2), which state that the Regional Administrator shall approve a list only if it meets the requirements of 130.7(b). EPA worked closely with the State as the State was developing the list, and intends to maintain a close partnership. Through the public comment process, EPA has solicited comments on EPA's identification of various pollutants and waterbodies to add to the list, and has considered all comments received.

EPA had no contact with the Santa Monica BayKeeper or San Francisco BayKeeper prior to or during its evaluation of the State list submissions concerning the content of the State's list submission or EPA's review of that submission.

Comment 5. Michele Pla, San Francisco Public Utilities Commission, Bureau of System

Planning and Regulatory Compliance, letter dated December 2, 1998

5.1 EPA should withhold approval of the listings of San Francisco Bay-Central Bay for copper, selenium, and diazinon.

Response: EPA's approval of these listings submitted by the State was finalized on November 3, 1998. Because this public comment period addresses only the additional waters and pollutants identified by EPA for inclusion on the 303(d) list, a response to this comment is unnecessary.

5.2 Legacy pesticides (DDT, dieldrin, and chlordane) should not be addressed through the 303(d) process because TMDLs are unlikely to help in reducing concentrations of these pollutants. There are virtually no ongoing discharges to which to apply load reductions, and these pollutants are not amenable to the waste load allocation process. EPA is required under Executive Order 12866 to conduct a more in-depth assessment of economic impacts on local governments and the scientific rationale for EPA's decision.

Response: Federal regulations at 40 CFR 130.7 require States and EPA to identify water quality-limited segments and associated pollutants without regard to the sources of those pollutants. The regulations do not exclude from listing waters where the impairment is due to legacy pollutants. As noted in the response to comment 4.4, it may be feasible to address legacy pollutant discharges through remedial actions.

Executive Order 12866 addresses the establishment of new regulations, not Agency decision making pursuant to existing regulations. Executive Order 12866 establishes no analysis requirements with regard to EPA's review and actions on State 303(d) listing decisions in addition to the requirements of 40 CFR 130.7. The listing actions are not rule makings and are thus not subject to Executive Order 12866.

5.3 Dioxin and related compounds appear to be pollutants of concern; however, POTWs and other point sources contribute 2% or less of the dioxin going into the Bay. These are the only sources that could realistically be subjected to the TMDL process. Consequently, the commenter questions whether the 303(d) listing mechanism is the appropriate tool for addressing dioxins in San Francisco Bay. EPA should address the key sources of dioxins— air sources— through a nationwide dioxin strategy, perhaps through the Persistent and Bioaccumulative Toxic Pollutant (PBT) Initiative.

Response: Federal regulations at 40 CFR 130.7 require States and EPA to identify water quality-limited segments and associated pollutants without regard to the sources of those pollutants. EPA's national guidance for the 1998 listing cycle specifically clarifies that water quality limited segments must be listed even if the pollutant(s) of concern are associated with air deposition (see National Clarifying Guidance for 1998 State and Territory Section 303(d) Listing Decisions, memorandum from Robert H. Wayland III, August 27, 1997).

EPA agrees that it is appropriate to address air sources of dioxins, and EPA intends to work with State agencies including the California Air Resources Board, Air Quality Management District, and the Regional Water Quality Control Board to characterize and address potentially significant air sources of dioxin discharges to San Francisco Bay. EPA also intends to address dioxins along with other priority toxic and Bioaccumulative pollutants of concern as part of the PBT Initiative. EPA is currently developing pilot TMDLs which address water quality impairment caused by air sources, and we look forward to working with the State and interested stakeholders to develop methods for establishing TMDLs for California waters impaired by air and water sources.

Comment 6. Gina M. Solomon, Natural Resources Defense Council, letter dated December 2, 1998

6.1 Commenter supports listing of San Francisco Bay for dioxin-like compounds as a high priority.

Response: See response to comments 1.1 and 1.2.

Comment 7. David R. Williams, Bay Area Dischargers Association, letter dated December 2, 1998

7.1 EPA used wrong standard of review in reviewing state list.

Response: See response to comment 4.3

7.2 Adding dioxin, DDT, dieldrin, and chlordane is not consistent with the Clean Water Act and the water quality standards in the San Francisco Bay Basin Plan.

7.2a. Commenter states that a fish advisory or an impairment of the fish consumption beneficial use cannot be reasonably construed as a violation of the Basin Plan narrative toxicity objective.

Response: See response to comment 4.4 above.

7.2b. The narrative bioaccumulation objective is not violated because this objective states that "controllable water quality factors shall not cause a detrimental increase...", and there is no evidence that dioxins, DDT, dieldrin, and chlordane are controllable.

Response: Without addressing whether a finding of "controllability" is actually required in order to apply the bioaccumulation objective for 303(d) listing process, we note that information in the record indicates that ongoing discharges of these compounds are at least partly controllable. It is also possible to address past discharges of pollutants such as these through remedial actions (e.g., site cleanups, dredging of contaminated sediments). See response to comment 4.4.

7.2c. It is not appropriate to list based on a fish advisory when there is no water quality criterion addressing the issues raised by the fish advisory; according to the commenter, a water quality standard requires both a designated use and a water quality criterion under CWA sec. 303(c)(2)(A). Using a fish advisory as a de facto water quality standard is an underground regulation in violation of the Administrative Procedures Act.

Response: See response to comment 4.4 and 7.2a.

7.3 Approving portions of the list based on fish advisories or narrative standards is inconsistent with the Clean Water Act.

Response: This comment addresses waterbody listings which were approved in a final decision issued by EPA on November 3, 1998. Because this public comment period addresses only the additional waters and pollutants identified for inclusion on the 303(d) list, a response is unnecessary. This issue is addressed in the Nov. 3, 1998, EPA staff report regarding California listing factors 2 and 5 (p. 6 & 8).

7.4 By failing to act on the list within 30 days, EPA forfeited its right to disapprove the list.

Response: See response to comment 4.1.

Comment 8. Leslie R. Katz, San Francisco Board of Supervisors, letter dated December 2, 1998

8.1 Commenter supports listing of San Francisco Bay for dioxin-like compounds as high priority.

Response: See response to comments 1.1 and 1.2.

Comment 9. Peter M. Rooney, California Environmental Protection Agency, letter dated December 3, 1998

9.1 San Francisco Bay should not be listed for dioxins/furans because data do not justify a fish advisory based on dioxins/furans alone. Dioxins were identified in the fish advisory because they contribute to the cumulative cancer risk, but better data would be needed to justify a fish advisory based on these dioxins and furans.

Response: EPA's decision to list the Bay for dioxins and furans is not based solely on the fish advisory, but also on other analyses of fish tissue data as described in the November 3, 1998, EPA Staff Report. The commenter provided no data or analysis to support the conclusion that the data do not justify a fish advisory based on dioxins/furans alone, even though EPA requested this analysis from the State but did not receive it. The quantitative analysis of angler risk due to consumption of contaminated fish which was in the listing record found significant increases in excess cancer risk due to dioxin (CTR Risk Assessment, June, 1997). See responses to

comments 4.3 and 4.4, above. We note that the commenter stresses that dioxins and furans were of less concern than PCBs and mercury when the advisory was issued, not that they were of no concern or are at acceptable levels.

9.2 San Francisco Bay dioxin levels appear to be less than national background. If dioxins are within the range of the national background, then the relative risks of consuming fish from the Bay would not necessarily warrant a fish consumption advisory for dioxins alone. Rather, the fish advisory should compare the risks of fish consumption with consumption of other proteins which also could contain trace amounts of dioxin. Listing the Bay for chemicals that occur at levels within the range of the national background is a national policy issue which USEPA will have to resolve. If dioxins are listed for the Bay, then arguably many other water bodies should be listed.

Response: As discussed in the November 3, 1998 staff report, the issue of dioxin/furan levels measured at other sites around the country is not relevant to the question of whether existing, readily available information supports the conclusion that San Francisco Bay is water quality limited due to these pollutants (p. 61). EPA agrees that there are national policy issues with respect to dioxin levels in many areas of the country and the appropriate response to this problem. EPA is addressing these issues in several forums including the Persistent and Bioaccumulative Toxic Pollutant (PBT) Initiative and National Dioxin Reassessment.

No commenter introduced into the 303(d) listing record actual data or analysis indicating that dioxin/furan levels measured in other parts of the country and cited as "background" levels are safe. On the other hand, several commenters noted that human health risks associated with dioxin/furan levels measured at other locations are significant. In addition, based on its review of recent data for two California reservoirs, one commenter asserted that dioxin levels measured at a California site with no known local discharge sources are much lower than the levels in San Francisco Bay or cited as "national background" levels by other commenters.

Listing decisions are required to be made for particular waterbodies with regard to particular pollutants based on a review of existing, readily available information. Information concerning local conditions, such as the impact of fish consumption from a particular waterbody on subsistence anglers and their families, can have a bearing on whether water quality standards such as the narrative bioaccumulation criterion and the COMM beneficial use (discussed in response to comment 4.4 above) are being met. For example, the bioaccumulation criterion states that "controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances" found in aquatic life. Whether or not an increase is "detrimental" could depend on the use made of the aquatic life -- e.g., if it is regularly consumed by local residents. Thus, local conditions can be relevant to the decision of whether or not to list a particular waterbody for a particular pollutant. Regardless of national background levels, EPA has concluded that the contribution of dioxins, furans, and dioxin-like PCBs to the impairment of the is significant enough that the Bay should be listed for those compounds.

This conclusion was not based solely on the mention of dioxins in the interim fish advisory,

although EPA did note that screening levels used in the study supporting the advisory were exceeded in many cases. The record before EPA also included the CTR risk assessment analysis of health risk to San Francisco Bay anglers, which indicated that cancer risks to those anglers are significantly elevated due to concentrations of dioxins and furans in fish tissue (CTR Risk Assessment, June, 1997). EPA based its decisions on all the information and analysis presented in the record, which together support the conclusion that San Francisco Bay is water quality limited due to dioxins and furans.

9.3 Dioxins/furans do not warrant a high priority. Dioxin-like PCBs pose a high level of concern because they contribute more than 90% of the potential cancer risk from consuming Bay fish. Dioxins & furans may contribute only 2-10% of the risk from dioxin-like compounds. Dioxins & furans should be lower priority than PCBs. PCBs and methylmercury should receive the highest priority in mitigation and clean-up efforts to better protect public health. Redirecting State resources from higher risk chemicals like methylmercury & PCBs to dioxins & furans will significantly delay meaningful reductions in health risks.

Response: We agree that dioxin-like PCBs pose a high level of concern. EPA's action is not intended to result in redirection of State resources from development of TMDLs for exotic species, mercury, or PCBs in favor of work on TMDLs for dioxins or furans. EPA strongly supports the State's emphasis on protecting public health through mitigation and cleanup of methylmercury and PCBs. EPA is establishing a high priority ranking for dioxin-like PCBs, which appear to pose a relatively high level of health risk. Although EPA approved the State's ranking of all PCBs as a medium priority, we are identifying the dioxin-like PCBs as a high priority in order to draw quicker attention to these pollutants. Although we agree that dioxin-like PCBs are responsible for a greater proportion of increased cancer risk than are dioxins and furans, the information available in the record before EPA indicates that dioxin-like PCBs, dioxins, and furans are all associated with significantly elevated health risks (see, e.g., CTR Risk Assessment, June, 1997). In setting a high priority ranking for dioxins, furans, and dioxin-like PCBs, a factor in EPA's analysis was that additional fish tissue monitoring will probably be needed to support development of TMDLs for these pollutants, and that would be more efficient to address each of these pollutants at the time the fish tissue data are collected.

9.4 If dioxins/furans are listed, only those isomers that have been assigned toxicity equivalency factors should be listed.

Response: EPA is listing the dioxins, furans, and dioxin-like PCBs listed in comment 1.2 as high priorities for TMDL development. All of these isomers have been assigned toxicity equivalency factors by the World Health Organization (WHO, June, 1997).

9.5 The fish advisory does not use the term "dioxin-like compounds." EPA should clarify this.

Response: The commenter is correct that the interim fish consumption advisory did not use the term "dioxin-like compounds", although it did appear to address each of the chemicals included in

this category and identified on page 59 of the EPA Staff Report dated November 3, 1998.

EPA apologizes for any confusion the use of the term “dioxin-like compounds” may have created. EPA used this term because it is used in EPA’s document “Estimating Exposure To Dioxin-like Compounds”, June 1994 to refer to this group of chemicals. These chemicals are often considered together for risk assessment purposes because they share a common biological mechanism for causing human health risk. EPA’s proposed listing decision identified the specific isomers of dioxins, furans, and dioxin-like PCBs which have been associated with elevated health risk in San Francisco Bay. However, because the use of this term has created confusion, the final listing decision refers separately to dioxins, furans, and dioxin-like PCBs, and lists the specific isomers covered by these terms.

9.6 Dioxin-like compounds should not be grouped together because dioxins and furans are chemically very different from PCBs, and the differences are significant regarding source identification, mitigation, and removal from the environment.

Response: See response to comment 9.5. EPA agrees that the specific approaches for developing TMDLs for these pollutants should consider the factors identified by the commenter.

9.7 If USEPA lists the Bay for dioxins/furans, the State will look to EPA to develop the TMDLs. This is a multimedia issue involving air deposition and storm water.

Response: States are responsible for developing TMDLs for waters on the 303(d) list regardless of whether the State or EPA listed the waterbodies. However, EPA recognizes the multimedia issues associated with probable dioxin and furan sources, and is willing to work with the State to conduct the monitoring, assessment, and planning associated with development of TMDLs for these pollutants.

Comment 10. Sharon N. Green, Tom Grovhoug, Tri-TAC, letter dated December 3, 1998

10.1 EPA’s review of California’s 303(d) list did not adequately determine whether the State’s decisions to list particular waterbodies were appropriate. For example, some listing decisions were based on as few as 3-5 data points. Therefore, EPA should reevaluate its approval of California’s listing of 472 waters and associated priority rankings.

Response: On November 3, 1998, EPA made a final decision to approve California’s listing of 472 waterbodies and associated priority rankings, and we are not reconsidering that decision. EPA invited comments concerning the additional waters and pollutants identified by EPA for inclusion on the California 303(d) list, and the comment concerning the validity of California’s listing decisions which EPA approved requires no further response.

10.2 EPA is inappropriately usurping the discretion of the State in proposing to add 37 waters and 12 pollutants for currently listed waters to the 303(d) list. EPA is using a double standard for

reviewing the State's decisions, which is not supported by federal law or regulations.

Response: As discussed under comment 4.3, EPA did not simply substitute its judgement for that of the State. EPA identified waters and pollutants for inclusion on the 303(d) list in situations where the State's analysis of available data and information was inconsistent with federal regulatory requirements, or where the State failed to adequately consider existing and readily available information in the listing process. EPA did not apply a "double standard" in its review of State listing decisions. EPA is not required to conduct a waterbody-by-waterbody review of the rationale underlying the State's decision to list waters on the 303(d) list. Such an analysis would be infeasible within the timeframes provided EPA to review State 303(d) list submissions. EPA reviews the listing methodology identified by the States to determine whether (1) existing, readily available information is compiled for assessment purposes and (2) the State applies an assessment method which fairly evaluates that information in accordance with well defined criteria for determining whether water quality standards are being exceeded or are expected to be exceeded in the future. See EPA Staff Report, November 3, 1998 for more information.

10.3 EPA has failed to demonstrate how and when TMDLs will be completed for the added waters and pollutants. It was unclear whether EPA expects the State to develop these TMDLs, or whether the Agency intends to prepare and implement these TMDLs itself. The Clean Water Act requires EPA to establish TMDLs within 30 days of disapproval of a State's listings.

Response: EPA expects the State of California to develop the TMDLs for the waters and pollutants added to the 303(d) list. EPA intends to continue working closely with the State to provide technical and financial assistance to support TMDL development. EPA is requesting that the State develop and submit schedules for each waterbody and/or pollutant added by EPA to the 303(d) list within 90 days of EPA's establishment of the final State 303(d) list. The requirement in 40 CFR 130.7 for EPA to establish TMDLs is triggered by EPA disapproval of TMDLs submitted by the State, not by disapproval of State lists.

10.4 EPA should ensure that the State allows for adequate public participation. The 303(d) listing process would be aided by greater-- and earlier-- public participation.

Response: EPA agrees that the listing process would be aided by more extensive public participation. EPA believes that California's public process was, in general, sufficient.

10.5 The public should be involved in the development of 303(d) listing guidelines used by the State. The new federal regulations should allow 1.5-2 years before the next listing cycle to provide sufficient time to adapt its program to new federal requirements.

Response: Federal regulations do not require that the State involve the public in the development of the guidelines it will apply in reaching 303(d) listing decisions. However, the commenters may want to address their concerns regarding public input into the listing guidelines directly to the State. The comment concerning new regulatory requirements is beyond the scope of this

decision. We note that the public had the opportunity to comment on the listing guidelines during the State public participation process.

Comment 11. Michael M. DeLeon, TOSCO, letter dated December 3, 1998

11.1 We concur with the comments of the Western States Petroleum Association (WSPA).

Response: See responses to comment 22 by WSPA.

11.2 The addition of dioxin to the list is not justified because it was inappropriate to use the fish consumption advisory and EPA estimates of risk as a basis for evaluating human health risk to subsistence fisherpersons who consume Bay fish.

Response: See responses to comments 4.3, 4.4, 9.1, and 9.2.

11.3 The EPA risk assessment developed for the California Toxics Rule (CTR) should not be used because the CTR is still in development. There are issues related to how the risk assessment was performed which could significantly reduce the estimated risks. For example, no consideration was given to the bioavailability of each of the dioxin and furan congeners. EPA should evaluate the impact of using the World Health Organization toxicity equivalency factors when evaluating the possible risks from fish consumption, and reevaluate its decision to list such a wide variety of dioxin and furan congeners.

Response: The San Francisco Bay angler risk assessment developed in support of the CTR was completed in June 1997 and was based on methods consistent with EPA risk assessment guidance. The fact that the CTR has not been promulgated is not relevant to the issue of whether the angler risk assessment must be considered as existing and readily available information for the 1998 303(d) list assessment. Results of this risk assessment were cited in comments to the State during the State listing process. Thus this information source was readily available to the State and should have been considered. The conclusion of the risk assessment that increased cancer risk due to dioxins and furans was significant, both relative to other contaminants and in an absolute sense, was a basis for EPA's decision to list dioxins and furans.

In reviewing the State listing submissions and material in the supporting record, EPA is required to consider whether the State considered all existing, readily available information in identifying water quality limited segments. In conducting this review during the limited period of time provided by federal regulations at 40 CFR 130.7, EPA considers whether data and information sources which were available to but not considered by the State are credible sources of assessment information. EPA is not required to assess each of these information sources in detail or to redo the assessments found in those sources in order to use these sources to support listing decisions. EPA understands that scientific methods for evaluating dioxin/furan risk are continuing to evolve. However, EPA concluded that the CTR risk assessment provides a credible source of information concerning water quality impairment of San Francisco Bay because the risk

assessment was developed using methods consistent with EPA guidance and was based on the best information available to EPA and its contractors at the time the risk assessment was developed in 1996-97. Moreover, EPA did evaluate the fish tissue data used in the CTR risk assessment using the TEQ method recommended by the commenter, and concluded that dioxin/furan levels were at levels of concern (memorandum from Henry Lee, EPA to David Smith, September 24, 1998). However, a full-blown reassessment of fish consumption risk for San Francisco Bay is beyond the scope of this listing review.

EPA agrees that the TEQ/TEF approach to evaluating dioxins, furans, and dioxin-like PCBs which has been endorsed by the World Health Organization should be used to evaluate new data collected in support of TMDL development.

11.4 The average dioxin concentration in San Francisco Bay fish based on the 1994 study was below the EPA average for background sites in the United States. Using the analysis EPA is proposing, many if not all of the U.S. water bodies would be identified as impaired for fish consumption. The staff report may also be read to suggest that the mere use of a waterbody by subsistence fisherpersons may create a need for the dioxin listing.

Response: See response to comment 9.2. We disagree that available information supports the commenter's conclusion that the comparison between local and national levels of dioxins supports a conclusion that many if not all U.S. water bodies would be identified as impaired for fish consumption. EPA did not mean to infer that the use of a waterbody by subsistence anglers may automatically create the need for a dioxin listing, nor do we agree with that assertion. Because the California listing record includes evidence of high fish consumption levels and of impairment to the fish consumption use, EPA considered that information in its review of the State's listing decisions.

11.5 A high priority ranking for dioxins and furans is inappropriate considering the ubiquitous nature of dioxin in the environment and the lack of conclusive evidence concerning dioxin risks.

Response: Federal regulations at 40 CFR 130.7 require consideration of two factors in setting priority rankings for developing TMDLs for listed waters-- the severity of the pollution and the uses to be made of the waters. The regulations also allow for the consideration of other factors in establishing priority rankings, and EPA has applied additional priority ranking factors identified by California in its listing guidelines. EPA has concluded that a high priority ranking for dioxins and furans is warranted given (among other factors):

- the importance of the fish consumption use in San Francisco Bay, particularly to large number of subsistence anglers,
- the significant level of estimated increased cancer risk associated with dioxins and furans based on the CTR risk assessment,
- the very high degree of public and local agency interest in the issue, as indicated by comments supporting the listing and high priority ranking from many elected officials, members of the public,

and the National Environmental Justice Advisory Council, and
- conformity of the listing with related activities, including EPA's PBT Initiative and the national dioxin reassessment, as well as the State's reassessment of the fish consumption advisory.

Comment 12. Karen Susag, California Zero Dioxin Exposure Alliance, letter dated December 3, 1998

Comment 12.1 Commenter supports the listing of dioxin compounds on the 303(d) list as a high priority.

Response: See response to comment 1.2.

Comment 12.2 EPA should give all PCBs a high priority for action.

Response: See response to comment 1.2.

Comment 12.3 EPA should require source analysis of 29 alleged dioxin sources in the Bay area to be completed within 3 years. If EPA fails to establish an appropriate schedule for TMDL development under Section 303(d), this will result in another opportunity for delay.

Response: EPA intends to work with the State to develop TMDLs to address dioxins, furans, and PCB contamination of San Francisco Bay. Dioxin TMDLs should include analysis of dioxin sources.

Neither the Clean Water Act nor federal regulations at 40 CFR 130.7 require the State to establish a schedule for TMDL development or require EPA to do so absent State action. However, EPA has established a national policy directing States to establish all needed TMDLs within 8-13 years of their listing on the 303(d) list (New Policies for Establishing and Implementing Total Maximum Daily Loads, memorandum from Robert Perciasepe, EPA Headquarters, August 8, 1997). In its letter to the State transmitting the final decision to add particular waters and pollutants to the 303(d) list, EPA requests that the State promptly establish schedules for development of TMDLs for each waterbody and pollutant added to the list.

Comment 12.4 EPA should respond publicly to the State's excuse that government lacks the resources necessary to take action on this high priority problem. If EPA cannot ensure the State will address this ongoing pollution problem, EPA should step in to implement and enforce dioxin pollution prevention in order to meet the goals of Section 303(d).

Response: The listing record indicates that the State opposed the listing of dioxins and furans based principally on its evaluation of fish tissue data, not on a lack of resources to address the problem. EPA will continue to work with the State and provide resources to support the development and implementation of TMDLs for waters on the 303(d) list.

Comment 12.5 Evidence discussed in CBE’s “On the Hook” report shows dioxin levels in Bay fish appear to be at least 30 to 100 times greater than those in fish from a Pacific-influenced lake far from known dioxin sources. This evidence further supports EPA’s proposal for dioxin by showing that dioxin contamination of Bay fish is not at “background” levels.

Response: EPA agrees that the information cited raises questions concerning the actual levels of dioxin in uncontaminated waterbodies. See response to comment 9.2.

Comment 12.6 EPA should expand its dioxin listing to include San Francisco Bay Area streams.

Response: EPA’s rationale for not listing Bay Area streams for dioxins was provided in the EPA Staff Report dated November 3, 1998. EPA’s decision not to list Bay Area streams for dioxin was final on November 3, 1998. During development of TMDLs for dioxin for San Francisco Bay, it will be necessary to consider dioxin discharges from Bay Area streams.

Comment 12.7 EPA should clarify that it is including all dioxin-like compounds, including dioxin like PCBs as a high priority in this action.

Response: EPA’s final action identifies as high priorities for TMDL development all listed dioxins, furans, and dioxin-like PCBs. See response to comment 1.2.

Comment 12.8 EPA should clarify that its analysis is based on protecting the health of individuals who are most highly exposed to dioxin and PCBs through eating San Francisco Bay fish.

Response: We agree. As discussed in the EPA staff report dated November 3, 1998, EPA cited the individual excess lifetime cancer risk associated with dioxin for the 90th percentile consumption level (a relatively high consumption rate) based on the CTR risk assessment study. EPA also notes information in the listing record indicating that average daily consumption of Bay fish by a large number of subsistence anglers may significantly exceed the 90th percentile consumption rate estimated in the CTR risk assessment (see, e.g., comments of Communities for a Better Environment).

Comment 12.9 EPA should acknowledge the severe dioxin and PCBs pollution threat to individuals who fish the Bay for food regularly to support a high priority ranking.

Response: See response to comment 11.5.

Comment 12.10 EPA should revise its analysis of the long-term nature of the dioxin and PCB pollutant threat. This fact should not point to a lower priority for action. The persistence of dioxins and PCBs in the environment means there is more harm from pollution which is not prevented.

Response: EPA generally agrees with the comment. Because EPA is establishing a high priority ranking for dioxins, furans, and dioxin-like PCBs, this factor would not change EPA's final decision.

Comment 12.11 EPA should revise its analysis regarding the difficulty of addressing this pollution threat. EPA should use a zero dioxin standard as one of its tools of analysis of how to solve the dioxin problem. EPA should include a pollution prevention approach to dioxin.

Response: This comment addresses the target level to be used for dioxin TMDLs, and is therefore not germane to the listing decision. As mentioned under comment 12.10, EPA's final decision to set a high priority ranking for dioxin would not be changed if EPA revised its analysis that dioxin may be difficult to address. EPA's conclusion that dioxin may be difficult to address was based on its understanding that significant amounts of dioxin present in the Bay environment are associated with historical discharges which may be more difficult to address than future discharges. EPA agrees that a "pollution prevention" approach to dioxin should be incorporated into future dioxin analysis and control efforts.

Comment 13. Steven Krefting, San Francisco Commission on the Environment, letter dated December 3, 1998

Comment 13.1 Commenter supports listing of San Francisco Bay for dioxin as high priority.

Response: See response to comments 1.1 and 1.2.

Comment 13.2 By establishing a phase-out period for dioxin discharges and by dealing with known sources of dioxin in the Bay Area, this proposal offers hope that the threats from dioxin contamination can be diminished.

Response: We share the commenter's goal of reducing health risks associated with dioxin to the extent feasible. However, we should clarify that the decision to list dioxins, furans, and dioxin-like PCBs on the 303(d) list does not imply any particular approach or target level for the control of dioxin discharges.

Comment 14. Michael R. Lozeau, Bill Jennings, San Francisco BayKeeper and DeltaKeeper, letter dated December 3, 1998

Comment 14.1 Commenters believes the listing process has resulted in a defensible list of impaired waters and the pollutants impairing them. The commenters do not concur with a number of the priorities proposed in the decision.

14.1a. All listings for copper, diazinon, nickel, PCBs, and selenium should be high priorities.

Response: On November 3, 1998, EPA issued a final decision to approve the State's priority rankings for copper, nickel, diazinon, and selenium. EPA did not seek public comment on those aspects of California's 303(d) list that were approved, but only on EPA's identification of additional waters and pollutants to be included on the final 303(d) list. Therefore, this comment is untimely with respect to the State's priority rankings for these TMDLs.

In identifying for listing dioxin-like compounds, including dioxin-like PCBs, as high priorities for TMDL development, EPA proposed decision had the effect of disapproving the State's priority ranking for dioxin-like PCBs and proposing a high priority ranking for these dioxin-like PCBs. EPA approved the State's medium priority ranking for PCBs other than dioxin-like PCBs. This was part of the November 3, 1998 decision and is not a subject of this comment period. EPA is setting a high priority ranking for dioxin-like PCBs for San Francisco Bay.

The commenter provides no supporting information concerning the comment that diazinon should be a high priority for San Francisco Bay urban streams. EPA is establishing a final priority ranking of low for diazinon TMDLs for San Francisco Bay urban streams based on the rationale described in the EPA staff report dated November 3, 1998.

Also see response to comment 14.1e with respect to priority rankings for Stockton Deep Water Channel.

14.1b. Listings of nutrients, pathogens, and sedimentation in Guadalupe River and Napa River should be high priorities.

Response: Guadalupe River was listed for mercury, not for nutrients, pathogens, and sedimentation. On November 3, 1998, EPA approved the State's rankings for Guadalupe River and Napa River. Because this public comment period addresses only the additional waters and pollutants identified by EPA for inclusion on the 303(d) list, a response to this comment is unnecessary.

14.1c. High priority rankings should be established for all pollutants impairing Delta Waterways, San Joaquin River, and Sacramento River.

Response: On November 3, 1998, EPA approved the State's rankings for these waters. Because this public comment period addresses only the additional waters and pollutants identified by EPA for inclusion on the 303(d) list, a response to this comment is unnecessary.

14.1d. High priority rankings should be established for chlorpyrifos and/or diazinon which are impairing several tributaries to Sacramento River, San Joaquin River, and the Delta.

Response: On November 3, 1998, EPA approved the State's rankings for these waterbodies. Because this public comment period addresses only the additional waters and pollutants identified by EPA for inclusion on the 303(d) list, a response to this comment is unnecessary.

14.1e. High priority rankings should be established for dioxin and PCBs for Stockton Deep Water Channel due to uncertainties in toxic site cleanups and recovery time, and the fact that many people are consuming tainted fish from the Channel.

Response: EPA disagrees that the cited factors support a conclusion that the priority rankings for dioxins and PCBs for Stockton Deep Water Channel should be high. The key difference between the Stockton Deep Water Channel and San Francisco Bay with respect to dioxins and PCBs is that a site cleanup is already underway to address the key pollutant source present at Stockton Deep Water Channel, whereas dioxin, furan, and PCB sources, transport, and bioaccumulation effects are poorly understood in the Bay Area. It is appropriate to allow the cleanup at the Stockton Deep Water Channel to continue prior to development of TMDLs, since it may address the water quality problem. It is more important for TMDLs for dioxins, furans, and PCBs to be developed in the near future in San Francisco Bay because of the absence of any ongoing site cleanup. Thus, TMDLs would add less value at this time to the efforts to address dioxin/PCB sources in Stockton Deep Water Channel than they would to efforts to further understand and address dioxin/furan/PCB issues in San Francisco Bay.

14.2 EPA should amend the schedules in the list to require TMDL completion according to specific suggested timeframes.

Response: EPA has established a national policy directing States to establish all needed TMDLs within 8-13 years of their listing on the 303(d) list (New Policies for Establishing and Implementing Total Maximum Daily Loads, memorandum from Robert Perciasepe, EPA Headquarters, August 8, 1997). In its letter to the State transmitting the final decision to add particular waters and pollutants to the 303(d) list, EPA requests that the State promptly establish schedules for development of TMDLs for each waterbody and pollutant added to the list.

14.3 Commenter concurs with the proposal to list 35 Bay Area streams for diazinon and to list San Francisco Bay for dioxin, DDT, dieldrin, and chlordane. Commenter joins with the comments of California Zero Dioxin Exposure Alliance.

Response: EPA has listed these pollutants. See responses to comment 12.

14.4 Commenter disagrees with comment in EPA's staff report dated November 3, 1998 that voluntary programs to address pesticide contamination can be used as a vehicle to develop TMDLs. The State's voluntary approaches do not work. Any rational implementation plan must provide for enforceable mechanisms. TMDLs should entirely supplant such voluntary programs and replace them with meaningful controls.

Response: This comment addresses TMDL development issues and is not germane to the proposed listing decision.

Comment 15. David S. Beckman, Natural Resources Defense Council, letter dated

December 3, 1998

Comment 15.1 The comment period noticed on November 4, 1998 refers only to that part of the decision regarding the additional 37 waterbodies and pollutants identified by EPA for inclusion on California's final lists.

Response: This statement is correct. The State, through the Regional Boards and State Board, provides opportunities for public comment prior to submission of the State 303(d) list to EPA. EPA is not required to take additional public comment when it approves in whole or in part a State 303(d) list.

Comment 16. Alexander R. Coate, East Bay Municipal Utility District, letter dated December 3, 1998

Comment 16.1 Commenter is concerned about proposal to list San Francisco Bay for dioxin-like compounds. Most dioxins come from stormwater runoff and air deposition, and publicly owned treatment works (POTWs) contribute only 2% of the dioxin found in state waters. Because best management practices to reduce nonpoint sources of dioxins do not currently exist, further reductions will probably be expected of point source POTWs when TMDLs are developed. This would be very costly and produce little benefit. The listing decision should reflect the minor contribution of dioxin from POTWs to the pollution of California's waters.

Response: Federal regulations at 40 CFR 130.7 require States and EPA to identify water quality-limited segments and associated pollutants without regard to the sources of those pollutants. EPA's national guidance for the 1998 listing cycle specifically clarifies that water quality limited segments must be listed even if the pollutant(s) of concern are associated with air deposition (see National Clarifying Guidance for 1998 State and Territory Section 303(d) Listing Decisions, memorandum from Robert H. Wayland III, August 27, 1997). EPA's listing decisions need not address the contributions of different sources to specific pollutant problems.

It should not be assumed that POTWs will necessarily be subjected to further pollution reduction requirements pursuant to TMDLs due to uncertainties concerning the ability to control other, more significant pollutant sources. The TMDL process provides an analytical framework in which source control needs and options can be evaluated through an inclusive public process.

Comment 16.2 Commenter supports efforts of EPA and others to collect data and information needed to develop TMDLs for dioxin-like compounds. Specific information collection tasks are identified.

Response: While EPA appreciates these suggestions and will share them with the State, the comment does not address the proposed listings and requires no further response.

Comment 17. John Bowers, The Lake Merritt Institute, letter dated December 3, 1998

Comment 17.1 Commenter supports proposed decision to list Lake Merritt due to dissolved oxygen and floating material.

Response: We appreciate the comment and have made a final decision to list Lake Merritt for dissolved oxygen and floating material.

Comment 17.2 Lake Merritt should be listed due to oil discharges. The commenter cites evidence of three serious discharges of petroleum products, one of which is alleged to have caused some adverse wildlife effects.

Response: On November 3, 1998, EPA approved the State's decision not to list Lake Merritt for oil based on the information available in the record at that time. EPA did not seek public comment on those aspects of California's 303(d) list that were approved, but only on EPA's identification of additional waters and pollutants to be included on the final 303(d) list. Therefore, this comment is untimely with respect to the State's listing decision for oil for Lake Merritt. However, EPA will forward the information provided by the commenter to the State for consideration in the next listing cycle. EPA believes the State should consider information of this type in evaluating potential exceedences of narrative objectives such as the objective addressing oil discharges.

Comment 17.3 Lake Merritt experiences levels of toxic pollutants in sediments which exceed levels determined in laboratory studies to be likely to be toxic to benthic organisms. EPA should describe the protocol or methodology used by the San Diego RWQCB to analyze effects of contaminated sediments on benthic organisms, and call upon the San Francisco RWQCB to cooperate with Lake Merritt Institute to perform similar analysis of benthic community effects in Lake Merritt in time for the 2000 listing cycle.

Response: EPA will provide the commenter with a copy of the study of benthic community effects developed for San Diego Bay and identify staff contacts at the San Diego RWQCB with whom the commenter can discuss the San Diego Bay study. EPA will also urge the San Francisco RWQCB to contact the commenter to discuss the possibility of conducting similar studies with respect to Lake Merritt.

Comment 17.4 Lake Merritt should receive a medium priority for TMDL development for dissolved oxygen and floating material (instead of the low priority ranking proposed by EPA) due to the following factors used by EPA in its priority ranking discussion in its staff report dated November 3, 1998:

17.4a. The waterbody use is significant because it provides critical foraging and roosting habitat for California brown pelican (endangered under federal Endangered Species Act) and for two additional species listed as species of special concern under the California Endangered Species Act.

Response: EPA agrees that the beneficial use associated with habitat for listed species or species of concern is important, but the record does not demonstrate that the pollutants for which Lake Merritt is being listed are causing impacts to these species.

17.4b. Commenter cites several instances of waterfowl mortality due to floating debris. In addition, it should be unnecessary to demonstrate actual reduction of recreational use of Lake Merritt in order for the adverse impacts of floating debris to be acknowledged.

Response: EPA appreciates the information but believe it is too anecdotal to provide compelling evidence of the degree of impairment.

17.4c. Commenter cites several activities under the current stormwater NPDES permit with which TMDL development could be coordinated. The activities cited focus upon demonstration of stormwater best management practices.

Response: EPA agrees that the cited activities could assist in implementation of TMDLs; however, they do not clearly include water quality assessment activities of the type needed to characterize the in-lake water quality problem and the degree of pollutant reductions needed to estimate TMDLs.

17.4d. Lake Merritt Institute's comments were made on behalf of all the Institute's 170 members and were endorsed by a unanimous vote of the Institute's Board of Directors. This provides evidence of the degree of public concern.

Response: We appreciate the interest of the Institute and its members in this issue, and note the letter of support received in support of the Institute's comments from Lake Merritt Lakesiders (see following comment). However, we do not believe that the degree of public concern, by itself, should override the other priority ranking factors discussed in EPA's Staff Report dated November 3, 1998. Overall, we believe these ranking factors support the conclusion that a low priority ranking is appropriate for this listing.

17.4e. The Institute feels that TMDLs will contribute significantly to the enhancement of Lake Merritt's beneficial uses.

Response: We agree but we do not find that the comment addresses the issue of the potential for beneficial use recovery or a higher priority for TMDL development.

Overall, we do not agree that the additional information cited in the comment supports a conclusion that Lake Merritt should receive a medium priority ranking. However, a low priority ranking for TMDL development should not be viewed as an excuse to delay TMDL development when opportunities arise to develop TMDLs in concert with related activities. EPA encourages the Lake Merritt Institute to work with the RWQCB, City of Oakland, and Alameda County to initiate TMDL development in concert with those agencies' assessment and planning activities

addressing the Lake, even if those activities begin in the near future.

Comment 18. Gloria Pieretti, Merritt Lakesiders, letter dated December 3, 1998

Comment 18.1 Commenter supports the actions proposed by Lake Merritt Institute in its comment letter, and encourages a higher priority ranking for Lake Merritt.

Response: Please see the responses to comment 17 above.

Comment 19. James F. Stahl, County Sanitation Districts of Los Angeles County, letter dated December 3, 1998

Comment 19.1 EPA's listing of Santa Clara River, Reaches 7 and 8 is invalid because:

1. The water quality standard relied upon by EPA is not currently applicable. The Los Angeles RWQCB adopted a variance from the standard during the time the objective is being re-evaluated.
2. The RWQCB inappropriately applied the chloride standard as an instantaneous maximum even though previous iterations of the Basin Plan stated that the objective should be applied as a weighted annual average value.

Response: We disagree that EPA applied a water quality standard which is not currently applicable. The "variance" referred to by the commenter (Regional Water Quality Control Board, Los Angeles Region, Resolution No. 97-02) is not a waterbody variance as defined under federal regulations at 40 CFR 131.13 and in the Water Quality Standards Handbook. Rather, the resolution established a set of specific interim effluent limitations for specific named dischargers to Santa Clara River. The chloride standard applied by the Los Angeles RWQCB in its listing analysis and subsequently applied by EPA in its review of California's listing submittal is currently applicable to the waterbody. The interim effluent limitations applicable to the specific dischargers listed in the resolution are based on discharger-specific variances established by the Regional Board Resolution. These interim limits are not sufficient to result in attainment of the applicable objective; nor has the RWQCB found that the interim limits are protective of beneficial uses. The Los Angeles RWQCB staff have applied this same interpretation of Resolution No. 97-02 (personal communication with Mark Smythe, RWQCB, December 5, 1998.) EPA acted appropriately in applying the 100 mg/l water quality standard for chlorides for Santa Clara River.

The RWQCB and EPA also acted appropriately in interpreting this objective as an instantaneous maximum. The Basin Plan establishes no requirement that the chloride objective must be applied as a weighted annual average value, as asserted by the commenter. States have substantial discretion in evaluating data in assessing compliance with applicable water quality standards, and EPA is basing its listing decision on the standards and data analysis conducted by the RWQCB in support of its decision to list Santa Clara River Reaches 7 and 8 for chlorides. The RWQCB considered the commenter's objections to the listing during the public participation process before the Regional Board, disagreed with the commenter's reading of the applicable standard and

method for interpreting the standard, explained the basis for its interpretation of the standards, and proceeded to list the waterbody.

The State Board's decision to overturn the Regional Board's decision to list Santa Clara River Reaches 7 and 8 was not based on a judgement that the Regional Board had applied a standard which was inapplicable or had misinterpreted the applicable standard. Instead, the State Board based its decision on the judgement that the applicable standard is too stringent and should not be applied for listing purposes. As discussed in the EPA Staff Report dated November 3, 1998, this was an invalid basis for deciding not to list a waterbody. Also see response to comment 4.3.

Moreover, based on the data provided to EPA, we note that the weighted annual average value for chlorides in Santa Clara River, Reaches 7 and 8 based on the 1996 data evaluated by the RWQCB exceeds the applicable standard 100 mg/l.

Comment 19.2 EPA failed to act on the list within 30 days and failed to establish the TMDLs within 30 days, as required by the Clean Water Act.

Response: See response to comment 4.1 concerning the comment about EPA action within 30 days, and response to comment 10.3 about TMDL establishment.

Comment 19.3 The rationale for setting a medium priority lacks an adequate basis. First, there is no evidence of use impairments due to chlorides in the subject reaches of Santa Clara River. Second, the potential for beneficial use recovery is low. Third, the degree of public concern is minimal. Fourth, studies are underway which may result in modification of the applicable standard, which could obviate the need for TMDLs. EPA is overstating the degree of use impairment, the potential for beneficial use recovery, and the degree of public concern. For these reasons, a medium priority ranking is unwarranted.

Response: EPA's decision to set a medium priority ranking for the chlorides TMDLs for Santa Clara River Reaches 7 and 8 is based on, and is the same as, the Regional Board's priority ranking decision. In addition to considering the severity of the pollution and the uses to be made of the waterbody, EPA's decision to set a medium priority ranking is also based on the fact that the Regional Board is currently working with watershed stakeholders to complete studies which will result in development of a chlorides TMDL and/or modification of applicable water quality standards within the next 2-4 years. Even if the applicable standard is modified, it is not clear that a TMDL will be unnecessary (personal communication with Deborah Smith, Los Angeles RWQCB, December 5, 1998). These watershed studies are reflected in the Regional Board TMDL workplan for 1999-2000. Therefore, based on the fact that the TMDL work is actually underway, EPA's decision to assign a medium priority is warranted.

Regarding the other factors the commenter raised in objecting to a medium priority ranking, EPA based its judgements that beneficial uses impacted by chlorides are moderately significant and that the degree of impact is low to moderate on communications with the RWQCB staff (personal

communication with Deborah Smith, Los Angeles RWQCB, September, 1998).

Comment 19.4 Coyote Creek should not be listed for toxicity because data relied upon for the listing are outdated, data from 1995-97 show no acute toxicity, and ammonia (which is listed separately on the 303(d) list for this waterbody) appears responsible for any observed toxicity. Virtually no acute or chronic toxicity has been observed over the past two years at the downstream estuary monitoring stations. The Long Beach Water Reclamation Plant, which discharges to Coyote Creek, is required to meet strict ammonia discharge limits by 2003. The use of chronic toxicity data is inappropriate for concrete lined channels such as Coyote Creek. Because exposure of any organisms to toxicity tends to be short lived, acute tests are more appropriate for this type of waterbody.

Response: As noted by the Los Angeles RWQCB in its response to the same comment made to the Regional Board during its listing process, the data provided by the commenter do not support delisting. EPA agrees with the Los Angeles RWQCB's conclusions for the reasons described in the Board's comment response. Both chronic and acute toxicity standards apply to Coyote Creek, and EPA disagrees with the comment that the use of chronic toxicity data is inappropriate for concrete lined channels.

Comment 20. Robert F. Shanks, Sacramento Regional County Sanitation District, letter dated December 3, 1998

Comment 20.1 EPA has an obligation to ensure that the state has complied with the Clean Water Act (CWA). The state did not comply with the CWA or state law.

20.1a. Commenter asserts that the State's listing guidelines constitute an underground regulation adopted in violation of the California Administrative Procedure Act.

Response: As discussed in the November 3, 1998, EPA staff report, the Regional Boards were not required to apply the State Guidelines. In any case, EPA has determined that the guidelines are consistent with the CWA and its regulations, as discussed in the EPA staff report.

20.1b. The State violated the CWA and several state laws by basing the list on informal criteria that were not formally or properly adopted as federal water quality standards by EPA or as state water quality objectives by the State.

Response: Federal regulations at 40 CFR 130.7(b)(3) define water quality standards to include numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements. Designated uses and associated narrative standards have been adopted and approved for all Regional Boards in California, and these uses and narrative standards, along with numeric standards for some pollutants, were required to be considered in the listing process.

20.1c. The State violated the CWA by basing the 1998 list on an invalid Section 305(b) report.

Response: See response to comment 4.5.

Comment 20.2 EPA shouldn't add dioxin-like compounds, DDT, dieldrin, and chlordane to the list for San Francisco Bay because there are no state water quality standards for them.

Response: See responses to comments 4.3 and 4.4.

Comment 20.3 The Sacramento-San Joaquin Delta should not be included in the Region 2 portion of the list because it is in the Central Valley Basin Plan, not San Francisco Bay. It is confusing to have the Delta in two different portions of the list. If EPA wants to add dioxin-like compounds for the entire Delta, it should clarify and renote.

Response: EPA's decision to add several pollutants to 303(d) list for the portion of the Delta identified as part of San Francisco Bay in Region 2 is based on the State's water body delineation used for assessment and listing purposes. EPA did not intend to add pollutants to the 303(d) list for any part of the Sacramento-San Joaquin Delta in Region 5 (with the exception of Stockton Deep Water Channel, which is listed separately).

Comment 21. Phil Bobel, Regional Water Quality Control Plant, letter dated December 4, 1998

Comment 21.1 EPA should not address dioxins in San Francisco Bay through the TMDL process. Dioxins should be addressed through national and international programs designed to prevent dioxin formation and release into the atmosphere. TMDLs are the wrong tool, at the wrong geographic scale, to address dioxin problems.

Response: Federal regulations require waterbodies and pollutants to be listed in cases where existing, readily available information indicate that applicable water quality standards are being exceeded (40 CFR 130.7). The regulations do not authorize EPA or the States to avoid listing waterbodies in cases where the pollutant problem is national or international in scope. Also, please see responses to comments 5.3 and 9.2.

Comment 21.2 EPA is not compelled to list dioxins because there is no requirement to list based on a fish advisory.

Response: See response to comment 9.1.

Comment 21.3 EPA should not make such an important decision until it completes its re-evaluation of dioxin risk. Commenter questions whether available fish tissue data are adequate for evaluating risk associated with these pollutants.

Response: Federal regulations do not authorize EPA to delay listing waterbodies in cases where existing, readily available information supports listing based on the fact that analytical methods for

those pollutants are undergoing revision. EPA believes available fish tissue data were adequate for purposes of developing the screening level risk assessment developed in support of the California Toxics Rule.

Comment 21.4 Commenter questions EPA's use of the CTR risk assessment for purpose of listing several types of dioxins when the CTR sets a numeric criterion only for TCDD (one form of dioxin).

Response: The CTR sets a numeric standard for TCDD consistent with national water program criteria development guidance. However, as the proposed CTR makes clear, designated beneficial uses of California's waters must be protected from impairment due to other forms of dioxin in addition to TCDD through the implementation of narrative water quality standards. It is Agency policy to utilize the internationally recognized TEQ/TEF system in implementing the TCDD standard.

Comment 22. Scott Folwarkow, Western States Petroleum Association, letter dated December 4, 1998

Comment 22.1: Commenter opposes the addition of San Francisco Bay to the list for dioxins and furans.

Response: EPA has concluded that existing and readily available information in the listing record support the conclusion that San Francisco Bay must be listed for dioxins and furans. The rationale for the decision is described in the EPA staff report dated November 3, 1998, and the final EPA decision letter.

Comment 22.2: EPA may be prescribing an inconsistent policy in the development of fish consumption advisories by addressing such a small segment of an angler population for San Francisco Bay. EPA's national guidance for development of fish consumption advisories recommends the use of an average consumption rate of 6.5 g/day. It is unreasonable to set more stringent limits on fish consumed by a small subpopulation as compared to limits established for fish eaten by the general population.

Response: As discussed under the responses to comments 4.4 and 9.1, EPA's decision to list San Francisco Bay for dioxins and furans is not based solely on the existence of a consumption advisory. EPA's decision does not constitute a new or revised consumption advisory. EPA did not issue the interim fish consumption advisory for San Francisco Bay; nor is EPA's decision to list San Francisco Bay for dioxins and furans inconsistent with EPA's national guidance concerning fish consumption advisories. EPA notes that advisories are often issued to protect more sensitive subpopulations (e.g., children and nursing mothers). It is EPA policy to address health risks to more sensitive or highly exposed segments of the population in making risk assessment and risk management decisions.

In making this 303(d) listing decision, EPA evaluated whether information in the listing record supports the conclusion that water quality standards are not being attained due to particular pollutants. In conducting this evaluation, EPA considers the existing beneficial uses of waters and whether those uses are protected. The listing record includes credible information indicating that substantial numbers of subsistence anglers consume large amounts of Bay fish, and that these exposure levels are associated with significantly elevated cancer risk (see CTR risk assessment, and comments of Communities for a Better Environment and California Zero Dioxin Exposure Alliance). With regard to the numbers of subsistence anglers in the Bay area, the CTR risk assessment estimates that approximately 125,000 anglers fish exclusively in San Francisco Bay (p. 3-37). Although EPA acknowledges that the exact number of these Bay anglers who regularly consume large quantities of Bay fish is unknown, the number could well be in the thousands. With regard to the amounts of locally caught fish consumed by subsistence anglers, the CTR risk assessment and information provided by commenters suggests a range of consumption rates. For example, the CTR risk assessment reports results of a national EPA study which estimates median and 90th percentile consumption rates for subsistence anglers of 30 g/day and 170 g/day respectively (p. 3-47). In addition, the health risk assessment prepared by the State for the site associated with dioxin, furan, and PCB contamination of Stockton Deep Water Channel assumed that subsistence fishers consume 150 g/day (“Health Consultation- McCormick & Baxter Creosoting Company, California Department of Health Services, January 15, 1997).

Comment 22.3: The presumption that fish tissue levels of dioxins and furans (referred to by commenter as PCDDs/Fs) are elevated from current and local source contributions is not consistent with the fact that the fish tissue concentrations are similar to national background concentrations of these compounds.

Response: See response to comment 9.2.

Comment 22.4: EPA may be contradicting itself in claiming the San Francisco Bay has elevated PCDD/F levels; at other locations, EPA has accepted these concentrations as a “natural anthropogenic background.”

Response: The commenter provides no specific information or examples to support this assertion. Information in the listing record indicates the human health risk level associated with dioxins and furans is unacceptably high for San Francisco Bay anglers, as discussed in the EPA Staff report dated November 3, 1998. EPA notes that PCDD/F compounds generally do not occur naturally, and EPA has not “accepted” these concentrations as an acceptable “background” level.

Comment 22.5: EPA is ignoring the distinction between the class of chemicals called dioxins (i.e., PCDDs/Fs) and what are loosely called “dioxin-like” chemicals (e.g. PCBs), and frequently uses those terms in a manner independent of identity.

Response: We apologize for any confusion the use of the term dioxin-like compounds in the proposed listing decision may have created. Both the proposed and final listing decisions refer to

a specific list of individual dioxins, furans, and dioxin-like PCBs. See response to comment 1.2.

Comment 22.6: EPA exceeded its authority in disapproving the State's decisions not to list certain waters and pollutants.

Response: The commenter did not identify specific ways in which EPA exceeded its authorities. Regarding EPA's review of the State decisions, see response to comment 4.3.

Comment 22.7: EPA inappropriately used fish advisories as de facto water quality standards and as the basis for regulatory action.

Response: EPA did not use fish advisories as de facto water quality standards, nor was EPA's decision based solely on its interpretation of the interim fish consumption advisory for San Francisco Bay. See response to comment 4.4.

Comment 22.8: EPA inappropriately relied on data unavailable to the public for review.

Response: The commenter did not specifically identify data which were unavailable for public review. All data and information relied upon by EPA in reaching its decision was available for public review during the comment period, and virtually all of the information was available for review during the State and Regional Board public comment periods. EPA provided copies of all documents in the decision record upon request by interested members of the public, including WSPA's consultant.

Comment 22.9: EPA inappropriately relied on personal communication as the basis for determining unacceptable risk.

Response: EPA's staff report includes several references to personal communications as the basis for information used in the listing analysis. There is no prohibition on the use of personal communications in making listing decisions, and all personal communications used in these decisions are documented in the administrative record. The comment does not reference a specific instance of concern to the commenter. To the extent the comment addresses the statement that "at national background levels, human health risk associated with dioxins/furans may be significant" based on personal communication with EPA Regional Scientist Arnold Den (EPA Staff report, p. 61), Mr. Den's statement is based on information in the "Health Assessment Document for 2,3,7,8 Dioxin and TCDD and Related Compounds," U.S. EPA, External Review Draft, June, 1994, which estimates that the current average increased cancer risk associated with existing body burdens of dioxins and furans is at the 10^{-4} - 10^{-3} level. This document is in the docket for this action.

Comment 22.10: EPA inappropriately ignored the relevance of national background levels when evaluating the San Francisco Bay for dioxin. Listing the Bay for dioxin would imply that similar actions should be adopted for most water bodies in the country.

Response: See response to comment 9.2.

Comment 22.11: Guidelines for listing were improperly and arbitrarily applied by EPA, and existing data and information (i.e., the State fish consumption advisory and health risk assessment prepared in support of the California Toxics Rule) were misinterpreted.

Response: See responses to comment 4.3, 9.2, and 11.3.

Comment 22.12: EPA based public health decisions on behavior of extreme populations which are assumed (rather than known) to exist.

Response: Information in the listing record supports a conclusion that a large number of subsistence anglers and their families consume contaminated Bay fish in amounts associated with excessive human health risk. See response to comment 22.2.

Comment 22.13: San Francisco Bay meets EPA's criteria, which would indicate that PCDDs/Fs are at background concentrations.

Response: Presumably this comment refers to EPA's proposed ambient water quality criterion for TCDD proposed in the California Toxics Rule and appears to conclude that dioxin and furan levels in the San Francisco Bay aquatic ecosystem are acceptable and at background levels because they meet the proposed EPA criterion. Several clarifying points are needed. First, the proposed CTR numeric criterion for TCDD is not in effect. In making the current 303(d) listing decision, EPA had to evaluate whether existing water quality standards applicable to San Francisco Bay were being attained, including beneficial uses and narrative objectives. Second, EPA notes that although the State and other commenters have asserted that the proposed numeric criterion would be met in San Francisco Bay, neither the State nor any other commenter submitted data or evidence supporting this conclusion.

Moreover, even if the proposed numeric criterion were currently in effect and were being met at this time, it would not imply that San Francisco Bay is necessarily meeting all water quality standards applicable to it. Dioxins, furans, and dioxin-like PCBs are extremely long lived in the environment after they are discharged and are expected to affect beneficial uses primarily through bioaccumulation in the food chain. It was appropriate for EPA to consider whether the bioaccumulation narrative objective and COMM beneficial use are being attained. As discussed in the response to comment 4.4, EPA concluded that the COMM beneficial used and narrative bioaccumulation objective are not being attained.

Regarding the comment concerning background concentrations, see response to comment 9.2.

Comment 22.14: It is unclear what effect, if any, the further regulation of point sources of dioxin to the Bay would have on background levels that are most likely attributable to nonpoint

anthropogenic and natural sources.

Response: The comment appears to infer that TMDLs only address point sources, that existing levels of dioxins in the Bay are at some uncontrollable “background” level, that most dioxins come from natural sources and that, as a result, TMDLs should not be required for the Bay for dioxin. We disagree with each of these points. See responses to comments 5.3, 9.2, and 22.4.

Comment 22.15 EPA improperly declared the Bay impaired for the beneficial use as a result of a fish consumption advisory. The advisory does not apply to dioxins and furans.

Response: We disagree that the interim consumption advisory does not apply to dioxins and furans and does not provide a basis for concluding that the fish consumption beneficial use is impaired. See response to comments 9.1 and 9.2.

Comment 22.16 Setting a high priority ranking based on “conformity with related activities” lacks any scientific merit. EPA and the San Francisco Regional Water Quality Control Board have acknowledged that existing data suggest dioxins are not a class of chemical of concern in the Bay. It is inappropriate to assign a high priority ranking at the time the national reassessment is still pending.

Response: Federal regulations at 40 CFR 130.7 require the priority ranking to take into account the severity of pollution and the uses to be made of the waters. As long as these factors are taken into account, other relevant factors may also be considered (see 57 FR 33040, 33044 (July 24, 1992)). In setting the priority rankings for waters added to the 1998 California 303(d) list, EPA applied the same ranking factors suggested in the State’s listing guidelines (SWRCB, 1997a), which included “conformity of related activities.” EPA believes it is reasonable to consider whether efforts are planned or underway which could assist in TMDL development or implementation in setting priority rankings. Considering such practical factors in TMDL rankings may increase the likelihood that TMDLs can be completed and implemented quickly and at lower total cost to the public.

EPA disagrees with the statement that EPA and the Regional Water Board have stated that dioxins are not of concern in the Bay. EPA disagrees with the commenter’s representation of EPA’s conclusions in the document cited in the comment (memo from Henry Lee to David Smith, September 24, 1998). In that document, EPA concluded only that available data indicated that dioxin-like PCBs are of greater concern than dioxins and furans, and that dioxins, furans, and dioxin-like PCB levels exceed the screening levels used in the State’s 1994 fish tissue data analysis. EPA also disagrees with the commenter’s representation of the San Francisco Bay RWQCB’s position on this issue. On February 18, 1998, the San Francisco Regional Board passed a resolution stating that “dioxin pollution is a high priority for immediate action to restore water quality and protect public health” (cited in “On the Hook,” an attachment to comments submitted by California Zero Dioxin Exposure Alliance).

With regard to the comment concerning the national dioxin reassessment, see response to comment 21.3.

Comment 22.17 The risk assessment EPA performed to support its decision was conducted using several flawed and dated methods, is overly conservative, and is inconsistent with existing risk assessment and risk management guidelines.

Response: The CTR risk assessment referred to by the commenter was completed in June 1997, before the State began its development of the 1998 303(d) list. For a discussion of EPA's decision to consider this information in the listing decision, see response to comment 11.3.

EPA notes that the decision to list a waterbody on the 303(d) list does not constitute a risk management decision. In contrast to a contaminated site cleanup or pollution control plan, for example, a 303(d) listing is based on a review of existing, readily available data and information performed to identify waters which need additional assessment and planning to determine appropriate pollution control measures.

Comment 22.18 The CTR risk assessment inappropriately used fish consumption information from a Santa Monica Bay survey.

Response: The Santa Monica Bay survey was the best information available at the time the CTR risk assessment was prepared. EPA notes that the State Office of Environmental Health Hazard Assessment considered this survey applicable to anglers throughout the state (CTR risk assessment, p. 3-17).

Comment 22.19 EPA has found risks in the 1×10^{-4} range acceptable when small populations were exposed inadvertently. At hazardous waste cleanup sites where exposures would affect a small population, health based cleanup levels for dioxins and furans in soils have been commonly established by EPA on the basis of a risk level of 2×10^{-4} . EPA's estimates of increased risk in San Francisco Bay fall within the range EPA considers acceptable.

Response: The commenter did not cite specific examples where EPA found risk levels in the 10^{-4} range acceptable. Therefore, EPA was unable to frame a detailed response to the comment. EPA disagrees that residual risk levels used for cleanup decisions at hazardous waste sites can be legitimately compared with existing estimated risk levels in San Francisco Bay which could be affecting thousands of anglers and their families. EPA is not bound to establish as acceptable risk levels for assessment purposes the least conservative levels used in specific site cleanups. Moreover, the application of increased cancer risk levels in the 10^{-5} - 10^{-6} range is consistent with the levels used by EPA in setting water quality standards.

Comment 22.20 EPA should have compared dioxin and furan risks to human health associated with consumption of contaminated fish from the Bay, consumption of fish from other sources, and consumption of other food sources. This comparison would show that consumption of fish from

the Bay would not significantly increase, and could lower human health risk associated with dioxins and furans.

Response: Federal regulations at 40 CFR 130.7 require EPA to determine whether water quality standards are being met-- not whether the relative risk associated with exposure to pollutants through a water in question is greater or lower than the risk associated with exposure through other routes. EPA is not required by the regulations to conduct the comparative analysis suggested by the commenter as part of the listing process. It would be unreasonable to expect EPA or the States to conduct such comparative analyses for each of the waterbodies and pollutants addressed on the 303(d) list given the time the comparative analysis would require and the limited time allotted EPA and the States to develop the 303(d) list. The relevant question for EPA in evaluating a State's 303(d) list is whether the State adequately considered all existing and readily available data and information to identify waters required to be listed. For the reasons described above and in the EPA Staff Report dated November 3, 1998, EPA concludes that the San Francisco Bay should be added to the list for the pollutants at issue.

Comment 22.21 There is no basis for suggesting that measures to target San Francisco Bay would have any effect on the levels of dioxins and furans from the Bay.

Response: The commenter appears to assume that dioxins and furans do not come from controllable sources at the local, regional, or national level. This assumption is unsupported by information in the listing record. Moreover, Section 303(d) and federal regulations at 40 CFR 130.7 make no provision for excluding from listing pollutants which are difficult or impossible to control (e.g., legacy pollutants or pollutants from natural sources) (see National Clarifying Guidance for 1998 State and Territory Section 303(d) Listing Decisions, memorandum from Robert H. Wayland III, August 27, 1997).

Comment 23. Peter W. McGaw, Contra Costa Council Environmental Task Force, letter dated December 4, 1998

Comment 23.1 Commenter supports comments submitted by Western States Petroleum Association.

Response: See responses to comment 22.

Comment 23.2 EPA has compromised sound scientific principles in proposing to list dioxin-like compounds. EPA should address the critique advanced by Western States Petroleum Association, and the proposal should be withdrawn.

Response: See responses to comment 22.

Comment 24. James McGrath, Port of Oakland, letter dated December 4, 1998

Comment 24.1 Rather than take the regulatory approach, the priority to address concerns about dioxins and furans should be to conduct research to characterize the problem, identify sources, and identify source control measures.

Response: EPA agrees that the appropriate next step is to conduct research and assessment work to characterize the dioxin and furan problem, identify sources, and identify source control measures. This is the purpose of TMDLs, and will be done during TMDL development. As discussed, EPA has concluded that available information shows that water quality standards are not being met with regard to these pollutants, and that existing controls are not sufficient to implement applicable water quality standards. Therefore, pursuant to EPA regulations, the water is required to be listed for these pollutants.

Comment 24.2 San Francisco Bay should not be listed for dioxins and furans due to the following factors:

24.2a. Commenter suggests insufficient fish tissue samples were available to permit an adequate characterization of San Francisco Bay dioxin and furan problems.

Response: The commenter did not indicate why insufficient data are available to support the listing decisions. While EPA agrees that more data will be necessary to fully characterize the problem, we believe existing data are adequate to support the reasonably rigorous screening level assessment decisions necessary to establish the 303(d) list. EPA believes the existing data and information, including fish tissue samples and other relevant data and information, are sufficient to show that San Francisco Bay is required to be listed under EPA regulations. EPA's analysis of the fish tissue samples and other data and information is described in the EPA Staff Report dated November 3, 1998.

24.2b. Present statistical methods for dealing with non-detect data for dioxins and furans are inadequate for proper risk evaluation.

Response: EPA's re-analysis of 1994 fish tissue data for San Francisco Bay found that the results do not vary substantially regardless of which method is used to consider non-detect data for dioxins and furans. For all three methods considered, the pilot study screening value for combined dioxin and furan toxicity equivalents (TEFs) was exceeded.

24.2c. Tissue concentrations of dioxins and furans are within the range of national background concentrations.

Response: See response to comment 9.2.

24.2d. It is difficult to determine if the beneficial use of the Bay is truly impaired. A fishing advisory does have the effect of impairing beneficial use. However, the advisory was temporary and not directed at dioxins and furans since a risk assessment has not been conducted.

Exceedence of a screening criteria may not warrant a fishing advisory. A thorough analysis of the relative importance of the individual pollutants has not been conducted.

Response: The interim advisory remains in effect, and continues to identify dioxins and furans as chemicals of concern. While it is true that the State has not issued a quantitative risk assessment of all pollutants, EPA did conduct a quantitative risk assessment (the CTR Risk Assessment, 1997) addressing all pollutants mentioned in the advisory (and several others), finding that dioxin is responsible for about 40% of the increased cancer risk associated with consumption of Bay fish. While EPA agrees that exceedence of a screening level alone may not constitute an adequate basis for determining use impairment, it was only one of several factors considered by EPA in its decision.

Comment 25. Douglas Y. Okumura, California Department of Pesticide Regulation, letter dated December 4, 1998

Comment 25.1 The listings of 35 San Francisco Area urban streams for diazinon cannot be justified on the basis of the data used by the San Francisco Regional Water Board. The Regional Board misinterpreted data for the sampled streams, improperly extrapolated results to other streams in the area, and ignored alleged quality assurance problems with the data used for the analysis. The commenter's agency would be unable to regulate diazinon sales or use in these watersheds based on the quality of these data.

Response: The Regional Board and State Board did not list these streams because the Regional Board completed its review of the relevant data and information after the State had submitted its final 303(d) list. In its comments to the State Board on the draft 303(d) list, U.S. EPA commented that all public comments submitted during the Regional Board comment period must be considered in the final state listing decisions, and that the San Francisco RWQCB had not considered comments by San Francisco BayKeeper. The Regional Board staff decided to review San Francisco BayKeeper's comments and submit its findings for EPA consideration in the final EPA listing decisions (SFRWQCB letter to USEPA, July 14, 1998). EPA followed the recommendation of the Regional Board to list the 35 urban streams based on the following analysis by the Regional Board, which the State Board did not address in its submittal:

- toxicity monitoring data from several sampling stations selected to be representative of runoff from urban creeks throughout the region showed acute toxicity during both wet and dry weather,
- toxicity identification evaluations conducted on these samples identified diazinon as the cause of observed toxicity,
- all streams within the jurisdiction of the Bay Area Storm Water Management Agencies Association were recommended for listing because these creeks drain primarily urban and suburban streams of which the sampling stations are representative.

EPA has concluded that this analysis provides a sufficient basis for extrapolating sampling results to similar urban streams in the Bay area. The commenter has provided no specific information which would support the assertion that the data were misinterpreted or that data quality is insufficient. Whether the commenting agency would be able to regulate diazinon based on these data is not relevant to the listing decision.

Comment 26. Mark Subbotin, Newhall Ranch Company, letter dated December 4, 1998

Comment 26.1 EPA should uphold the State's decision not to list Santa Clara River reaches 7 and 8 because:

26.1a. The current surface water chloride limitation in effect (190 mg/l) is stringent enough to protect beneficial uses, and the Regional Board incorrectly used 100 mg/l as the object rather than the existing interim limit of 190 mg/l.

Response: See response to comment 19.1.

26.1b. A Regional Board staff member testified that a chloride study is underway for the River and it is likely the objective would be revised upward.

Response: As discussed in the responses to comments 4.3, 19.1, and 19.3, the existing applicable standards must be applied for listing purposes regardless of potential future changes to those standards. If the standard is revised in the future, the listing would be evaluated based on the new standard in the next listing cycle.

26.1c. No evidence of beneficial use impairment exists downstream from Reaches 7 and 8.

Response: See response to comment 19.3.

Comment 27. Fredric P. Andes, Sonnenschein, Nath and Rosenthal, letter dated December 4, 1998

Comment 27.1 Dioxin should not be listed for San Francisco Bay because the levels of dioxins in the water column did not exceed the applicable water quality criteria.

Response: EPA is not asserting that water column standards for dioxins and furans were exceeded. Rather, EPA is listing the Bay for dioxins and furans because of our conclusion, based on fish tissue bioaccumulation data, that the bioaccumulation water quality criterion and the COMM beneficial use are not being met, as discussed in the response to comments 4.4 and 22.13.

Comment 27.2 Dioxin concentration in the Bay is within national background levels.

Response: See response to comment 9.2, above.

Comment 27.3 The fish advisory was an interim advisory only, which was based on exceedence of screening levels rather than a quantitative risk assessment.

Response: As discussed in the November 3, 1998 staff report, EPA's decision to list the Bay for dioxins and furans is based on additional evidence of health risk associated with dioxins and furans in the Bay as well as the fish consumption advisory.

Comment 27.4 Commenter asserts that water quality standards consist of two parts, a designated use and a water quality criterion. It is not appropriate to base an impairment decision solely on whether the waterbody meets a designated use; rather, there also has to be reference to an accompanying criterion. Unless decisions are based on (numeric) water quality criteria, they are arbitrary.

Response: See response to comment 4.4, above.

Comment 27.5 It is not appropriate to presume that the waterbody is impaired for every substance listed in the fish advisory. Regarding the Bay, the evidence is that the risk posed by dioxins is very small compared to that posed by other substances such as PCBs. EPA should evaluate each group of substances separately to determine whether the waterbody meets the applicable water quality standard for each.

Response: See response to comment 27.3 above. The CTR risk assessment provided an evaluation of all substances included in the interim fish consumption advisory, and concluded that dioxin was responsible for approximately 40% of increased cancer risk associated with consumption of Bay fish, compared to approximately 50% for PCBs.

Comment 27.6 EPA is incorrect in asserting that the Bay does not meet the narrative standards that prohibit "the discharge of toxic substances in toxic amounts which adversely affect beneficial uses" because EPA has not identified any source that has discharged dioxins in amounts that have had adverse impacts on the Bay. It is probably not possible to do so, given that dioxin levels in the Bay are within national background levels.

Response: EPA's November 3, 1998 staff report paraphrased the narrative objective applied by EPA in the listing review, and we apologize for any confusion this paraphrasing may have caused. See response to comments 4.4 concerning the specific narrative objective applied in reaching this listing decision. Regarding the comment about national background levels, see response to comment 9.2.

Comment 27.7 Basing a listing decision on a fish consumption advisory alone is inappropriate. Advisories are issued to trigger further investigation. Advisories should be used in the 303(d) listing process only after very careful review of the underlying information to determine whether that information shows that a water quality standard is not being met.

Response: As discussed above, there is evidence, in addition to the fish advisory, of health risk associated with dioxins/furans, based on other analysis of fish tissue data, as discussed in the November 3, 1998 staff report.

Comment 27.8 The Bay should not be listed for dioxin because concentrations are within national background levels. EPA's statements that "large amounts of subsistence fishers" consume "large amounts of fish caught in the Bay" are too vague to support listing when concentrations are within national background. Other areas in the nation have high fish consumption rates too. Without proof that the fish consumption rates in the Bay Area pose an unacceptable risk, the fish consumption information is not relevant to a listing decision. EPA does not have an adequate basis for finding "significant risk" because (a) the CTR risk assessment was a conservative assessment which cannot be relied on to make a finding of impairment; (b) EPA should not rely on informal guidance for developing fish consumption advisories in deciding what level of a substance constitutes an acceptable risk, and (c) the screening levels used in the State's fish consumption advisory were not intended to be a test of acceptable risk.

Response: We disagree. See response to comment 9.2, above, regarding national background levels. See response to comment 22.2, above, regarding fish consumption levels. See response to comments 4.3, 9.1, and 11.3 concerning the adequacy of the CTR risk assessment for listing purposes and the basis for assessing acceptable risk. See response to comment 24.2(d), above, regarding screening levels.

The Clean Water Act does not require a specific finding of "significant risk" or "unacceptable risk" for a waterbody to be listed. Lists are to include all "water quality-limited segments still requiring TMDLs" based on an evaluation of all existing and readily available water quality-related data and information (40 CFR 130.7(b)). As discussed above, EPA has determined that such data and information shows that water quality standards are not being met with regard to the concentration of dioxins and furans in Bay fish tissue and that there are no existing controls that are sufficient to implement such standards.

Comment 27.9 The State has made a considered decision that the levels of dioxin in the Bay fish do not rise to the level of a violation of the applicable water quality standard. EPA cannot simply substitute its judgment for that of the State. To do so would undermine the principle of State primacy that is central to Section 303 and to the Clean Water Act standards program as a whole.

Response: The State did not consider all the information in the listing record in reaching its decision, and did not articulate a clear basis for its conclusions regarding those data and information sources in the record which were considered. Specifically, the State failed to consider the CTR Risk Assessment and other information submitted by Zero Dioxin Exposure Alliance in comments to the State and Regional Boards, and did not provide a rationale for not considering this information. Moreover, the State did not provide an adequate rationale to support its conclusion that dioxins should not be listed because levels of fish in San Francisco Bay are similar to levels at other sites in the country. Finally, the State did not provide an adequate rationale to

support its contention that dioxins would not be included in a final fish consumption advisory for San Francisco Bay, despite the fact that it is mentioned in the interim fish consumption advisory. Based on its review of the full listing record, EPA concluded that the State had not met the listing requirements of federal regulations at 40 CFR 130.7. See the responses to comments 4.3 and 4.6, above.

Comment 28. Mark Leno, San Francisco Board of Supervisors, letter dated December 4, 1998

Comment 28.1 Commenter supports listing of San Francisco Bay for dioxin compounds as a high priority.

Response: EPA has decided to add the waters and pollutants proposed in November, 1998 to the final 1998 California 303(d) list. In the final listing decision, dioxins, furans, and dioxin-like PCBs are identified individually because some commenters were confused by the term “dioxin-like compounds”. See response to comments 1.1 and 1.2.

Comment 28.2 By establishing a phase-out period for dioxin discharges and by addressing known sources of dioxin in the Bay Area, this proposal can also gain needed strength in finding solutions to the dioxin problem.

Response: The listing decision does not address the specific content of the TMDL or assume any particular approach for implementing the TMDL such as a “phase out” of dioxin discharges. The appropriate approach for addressing dioxin sources in a manner that will bring the Bay into compliance with applicable water quality standards will be determined during development and implementation of the TMDLs.

Comment 29. Sue Bierman, San Francisco Board of Supervisors, letter dated December 4, 1998

Comment 29.1 Commenter supports listing of San Francisco Bay as a high priority.

Response: See response to comment 28.1.

Comment 29.2 By establishing a phase-out period for dioxin discharges and by addressing known sources of dioxin in the Bay Area, this proposal can also gain needed strength in finding solutions to the dioxin problem.

Response: See response to comment 28.2.

Comment 30. Teresa Jordan (3 letters), letters dated December 3 and 4, 1998

The commenter provided numerous comments concerning EPA's partial approval action dated November 3, 1998. Because the comments do not address the merits of the additional waters and pollutants identified for listing, this responsiveness summary will not address them.

Comment 30.1 Commenter seeks clarification of the differences between priority rankings and listing factors. Why were some waters added for DDT and/or diazinon in one Regional Board, and deleted for the same pollutants in another Regional Board?

Response: The listing factors were used by the State to determine whether waters need to be listed; the priority rankings and ranking criteria were used to determine the priority ranking assigned to each listed water body and pollutant. Waters and pollutants are being added to the 303(d) list in cases where existing, readily available information indicates that water quality standards applicable to those waters are not being met or are not expected to be met. The State and EPA reviewed the specific data applicable to the subject waters in determining whether specific waters met the listing requirements. Where the available information and data indicated that a waterbody or pollutant listed on the 1996 303(d) list no longer met the listing requirements, the State removed these waterbodies and/or pollutants from the 1998 303(d) list.

Comment 30.2 Commenter supports listing of Stemple Creek and Estero de San Antonio, but believes a medium priority is appropriate because no member of the public raised issues about the waterbody.

Response: We do not agree that lack of public interest provides a basis for setting a higher priority ranking. In general, we believe that a higher level of public interest would be a factor indicating that a medium or high priority ranking might be warranted. Federal regulations require the State and EPA to consider the severity of the pollution and the uses to be made of the waterbody in setting priority rankings. Other factors may also be considered. EPA's analysis of ranking factors for Stemple Creek and Estero de San Antonio is included in the EPA Staff Report dated November 3, 1998.

Comment 30.3 Explain the statement that the State did not explicitly address the issue of whether furans should be listed.

Response: The State's listing package and subsequent comments on EPA's identification of additional listings did not address furans for San Francisco Bay, and whether any waters should be listed for furans.

Comment 30.4 Commenter supports the listing of San Francisco Bay for dioxins, furans, dieldrin, chlordane, and DDT.

Response: We appreciate the comment.

Comment 30.5 Commenter supports the listing of Lake Merritt.

Response: We appreciate the comment.

Comment 30.6 San Francisco Urban Streams listed for diazinon should receive a medium priority.

Response: EPA is following the Regional Board staff's recommendation concerning priority ranking for diazinon in urban streams based on the rationale in the Regional Board's letter to EPA dated July 14, 1998. We believe the Regional Board's rationale to set a low priority based on the existence of alternative mechanisms currently in place to address this pollutant, in addition to consideration of the severity of the pollution and the uses to be made of the water, is persuasive.

Comment 30.7 Commenter supports listing of Santa Clara River at a high priority ranking.

Response: Available information would not support the conclusion that the beneficial use of concern is so significant and degree of impairment or threat so high as to warrant a high priority ranking. In any case, a TMDL may be developed earlier than otherwise indicated by the medium priority ranking because the studies which the State plans to rely upon for TMDL development are already underway.

Comment 30.8 Commenter supports listing of Stockton Ship Channel at a high priority ranking.

Response: See response to comment 14.1(e).

Comment 31. Ronald Frazier, Global Garden Projects, Inc., letter dated December 6, 1998

Comment 31.1 Due to a delay in receiving the press release concerning the public comment period, commenter requests a 30 day extension in the comment period.

Response: EPA provided the November 3, 1998 decision letter, supporting staff report and copy of the federal register notice discussing the public comment period in early November. The press release was mailed in late November. Because the federal register notice identified the end of the comment period and the commenter's request was received on December 7, 1998, EPA determined that an extension of the comment period is unwarranted. EPA staff discussed the commenter's listing concern-- pollutant contamination at Hamilton Air Force Base-- with the commenter in a telephone conversation in mid-November 1998 (telephone conversation with Ronald Frazier and David Smith, November 1998). EPA is listing San Francisco Bay for dioxins, furans, DDT, dieldrin, and chlordane, and the State has already listed the Bay for PCBs. Therefore, the pollutants mentioned by the commenter in the November telephone conversation are being listed on the 303(d) list.

Comment 32. Gavin Newsom, San Francisco Board of Supervisors, undated letter received

December 7, 1998

Comment 32.1 San Francisco Bay should be listed for dioxin as a high priority.

Response: We agree. See responses to comment 1.1 and 1.2.

Comment 33. Robert F. Andrews, undated letter received December 8, 1998

Comment 33.1 EPA should not list San Francisco Bay for “dioxin-like compounds” for the following reasons:

33.1a. The classification of the listing is too broad, covers some compounds that are already covered, and some that are not harmful.

Response: The commenter provided no specific information describing the compounds believed to be “not harmful” or the basis for that assertion. We disagree that the listing is too broad or that listed compounds are “not harmful.” Regarding the comment about listing of compounds already covered by the State listing, see responses to comments 1.2, 9.4, and 9.5, above.

33.1b. The listing is based on dioxin content of Bay fish, which is no different from fish elsewhere in the United States.

Response: See response to comment 9.2, above.

33.1c. There is more health risk from eating other meats than from eating fish.

Response: EPA’s decision to list dioxins for San Francisco Bay is based on data and information indicating that water quality standards are not being met due to this pollutant, not on an analysis of relative risk associated with different pollutants. See response to comment 22.20, above.

33.1d. There are bigger human health risk problems in the Bay, and the EPA listings would reduce efforts by the San Francisco RWQCB to control pollutants with a higher risk.

Response: EPA’s action is not intended to result in redirection of state resources from development of TMDLs for other pollutants currently being addressed by the San Francisco Bay RWQCB. See response to comment 9.3, above.

Comment 33.2 EPA has provided a platform for vocal environmental groups to cause time to be wasted, with little regard for good science.

Response: The Clean Water Act requires States to identify water quality limited segments (CWA 303(d)(1)). EPA has codified this requirement in its regulations at 40 CFR 130.7. The statute and regulations require EPA to approve or disapprove States’ lists. In taking this action, EPA

evaluates the State's consideration of existing, readily available data and information which the State is required to consider regardless of its source. A state may decide not to use certain existing and readily available data or information as a basis for listing waters, provided that it gives a reasonable rationale for that decision. Thus, EPA disagrees that the listing process and EPA's review process provides a platform for wasting time without regard for sound science. Rather, the listing process provides a forum for considering and evaluating data and information to identify water quality concerns.

Comment 33.3 The dioxin issue is much bigger than San Francisco Bay. It would be useful for EPA to study the bigger picture to determine if there is a problem in the United States, and, if so, what are the options to reduce the magnitude.

Response: See responses to comments 5.3, 9.2, and 21.1, above.

Comment 34. Melissa Braxton, undated letter received December 8, 1998

Comment 34.1 Commenter considers EPA's proposal a "good plan." Could there be a better way to use water sewage treatment so that the additional streams would not have to be added?

Response: EPA and the States are required to carry out the Section 303(d) listing process in accordance with the requirements of the Clean Water Act and federal regulations at 40 CFR 130.7. EPA is obliged to evaluate whether the State adequately considered existing, readily available information in the listing record to determine whether individual waterbodies and pollutants meet federal regulatory requirements for listing. Federal regulations at 40 CFR 130.7 would allow water quality limited waterbodies to be withheld from the Section 303(d) list if required technology-based pollution controls would result in attainment of water quality standards. The listing record before EPA did not identify any instances concerning the additional 37 waters and 12 pollutants EPA identified for inclusion on the list where application of additional required technology based controls would result in attainment of water quality standards. To the extent sewage treatment results in some listed waters meeting water quality standards, that could be a basis for delisting those waters in the future.